## CLAIMS:

1. The use of a Vanadium containing compound of the formula:

5 wherein L-L' is:

or

10 and L' is COO, CONR<sup>5</sup>, CONHR<sup>6</sup>, CH<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>

or wherein L and L' together form a group:

15

or a group:

wherein L" is O, S or NH;

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are independently H, hydroxyl, C<sub>1-6</sub> alkyl, optionally substituted by hydroxy or NR<sup>7</sup>R<sup>8</sup>, C<sub>3-6</sub> cycloalkyl, optionally substituted by hydroxy or NR<sup>7</sup>R<sup>8</sup>, phenyl, optionally substituted by C<sub>1-3</sub> alkyl, hydroxy, NR<sup>7</sup>R<sup>8</sup> or SO<sub>3</sub>, (OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub> (NHCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>, an amino acid or a peptide consisting of 2 to 5 amino acids; and

R<sup>7</sup> and R<sup>8</sup> are independently H or C<sub>1-6</sub> alkyl;

- or a pharmaceutically acceptable salt thereof
  in the manufacture of a medicament for use in inhibiting phosphatases.
  - 2. The use of a Vanadium containing compound of the formula:

15

wherein L-L' is:

or

20

and L' is COO, CONR5, CONHR6, CH2NR5R6

or wherein L and L' together form a group:

5

or a group:

10

15

wherein L" is O, S or NH;

 $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$  and  $R^6$  are independently H, hydroxyl,  $C_{1-6}$  alkyl, optionally substituted by hydroxy or  $NR^7R^8$ ,  $C_{3-6}$  cycloalkyl, optionally substituted by hydroxy or  $NR^7R^8$ , phenyl, optionally substituted by  $C_{1-3}$  alkyl, hydroxy,  $NR^7R^8$  or  $SO_3$ ,  $(OCH_2CH_2)_n$  ( $NHCH_2CH_2$ )<sub>n</sub>, an amino acid or a peptide consisting of 2 to 5 amino acids; and

R<sup>7</sup> and R<sup>8</sup> are independently H or C<sub>1-6</sub> alkyl; or a pharmaceutically acceptable salt thereof

20 in the manufacture of a medicament for use in inhibiting phosphatases.

WO 2005/054257 PCT/GB2004/005080

3. The use as claimed in claim 1 or claim2 wherein the medicament is for use in inhibiting inositol phosphatases such as PTEN.

- 4. The use as claimed in any one of claims 1 to 3 wherein the medicament is for use in treating diseases where inhibition of apoptosis is required.
  - 5. The use as claimed in claim 4 wherein the disease or condition is a neurodegenerative disease such as Alzheimer's disease, wound healing, burns, heart hypertrophy, hypoxia, ischemia, diabetes, sports injuries and as an anticancer agent.
  - 6. The use as claimed in any one of claims 1 to 5 wherein the compound is potassium bisperoxo (bipyridine) oxovanadate (bpV(bipy), potassium bisperoxo(1,10-phenanthroline)oxovanadate (pV(phenanthroline)), potassium bisperoxo (piconlinate) oxovanadate (pV(pic)) and potassium bisperoxo(phenylbiguanide)oxovanadate (pV(biguan)).
    - 7. The use as claimed in any one of claims 1 to 5 wherein the compound is pV(phenbig) [dipotassium bisperoxo(phenylbiguanide)oxovanadate] or bpV(HOpic) [dipotassium bisperoxo(5-hydroxypyridine-2-carboxyl)oxovanadate].
  - 8. The use as claimed in claim 7 wherein the medicament is for the treatment of diabetes.
  - 9. A Vanadium containing compound of the formula:

25

10

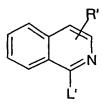
15

20

where L-L' is:



or



and L' is CONR5 and CONHR6; and

- 5 wherein  $R^1$  is  $C_{1-6}$  alkyl.
  - 10. A Vanadium containing compound of the formula:

10

where L-L' is:

or

15

and L' is CONR5 and CONHR6; and

wherein  $R^1$  is  $C_{1-6}$  alkyl.

11. A Vanadium containing compound of the formula:

5

wherein L and L' together form a group:

$$R^{1} \xrightarrow{NH} H \xrightarrow{L'} N \xrightarrow{R^{4}} R^{3}$$

wherein L' is O, S or NH;

 $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  are independently H,  $C_{1-6}$  alkyl, optionally substituted by hydroxy or  $NR^7R^8$ ,  $C_{3-6}$  cycloalkyl, optionally substituted by hydroxy or  $NR^7R^8$ , phenyl, optionally substituted by  $C_{1-3}$  alkyl, hydroxy,  $NR^7R^8$  or  $SO_3$ ,  $(OCH_2CH_2)_n$  ( $NHCH_2CH_2$ )<sub>n</sub>, an amino acid or a peptide consisting of 2 to 5 amino acids; and  $R^7$  and  $R^8$  are independently H or  $C_{1-6}$  alkyl; or a pharmaceutically acceptable salt thereof.

12.

15

20

12. A pharmaceutical formulation comprising a compound as claimed in any one of claims 9 to 11, optionally together with one or more pharmaceutically acceptable excipients, diluents or carriers.